

## ABSTRACT

Based on an area which was accessed by a just-previous read command and an area which is required by a present read command, 5 the direction of the access, the interval between the areas, and the area size are detected, and the position and size of an area on a disk memory medium where prereading of data is to be carried out are determined by using the detected values. Therefore, prereading of data can be efficiently carried out in response to 10 continuous read commands which request data that are located in the backward direction, i.e., the direction in which an address decreases, or data that are located separately at equal intervals.